# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,	)	
Plaintiff,	, )	
v.	)	Civil Action No. 98-02548-HHK
	)	
DETROIT DIESEL CORPORATION,	)	
Defendant.	) )	
	)	

## AGREEMENT RESOLVING DISPUTE UNDER CONSENT DECREE

WHEREAS,

A. The United States, on behalf of the U.S. Environmental Protection Agency ("EPA"), and Detroit Diesel Corporation ("DDC") (collectively, the "Parties") are parties to a Consent Decree entered in this action on July 1, 1999, as amended, providing for, among other things, emission reductions from DDC's on-road heavy duty diesel engines ("HDDEs") through certain requirements (the "on-road requirements") for obtaining Certificates of Conformity under Title II of the Clean Air Act, 42 U.S.C. § 7521 et seq. (the "Act"), and regulations promulgated by EPA thereunder allowing the HDDEs to be sold in the United States;

B. Paragraph 154(a) of the Consent Decree provides that DDC may seek termination of the on-road requirements on the earlier of December 31, 2004, or two years after the date in 2002 when DDC received Certificates of Conformity for all of its engine families required to meet the NOx plus NMHC Limit (as defined in the Consent Decree), by certifying to the United States that DDC had met all of the requirements of Paragraphs 13 through 20 and 23 through 25 of this Decree, provided that the United States does not dispute DDC's certification;

C. On December 30, 2004, DDC sought termination of the on-road requirements of the Consent Decree by submitting a letter stating that it had certified compliance with the requirements of Paragraphs 13 through 20 and 23 through 25;

D. On January 11, 2005, the United States sent DDC a "Notice of Dispute" disputing DDC's right to termination of the on-road requirements. The Notice cited an unresolved issue relating to DDC's use of an auxiliary emission control device to control white smoke on 35,667 model year 2000 Series 50 Urban Bus Engines and model year 2001 Series 60 HDDEs that was not accurately described in DDC's applications for Certificates of Conformity for the engines and was not approved by EPA. This matter arose due to an error in its white smoke control software that DDC identified and disclosed to EPA in May 2000, which DDC corrected as reflected in a running change notification dated July 14, 2000, and for which DDC submitted an Emission Defect Information Report on June 6, 2000, and conducted a voluntary recall campaign, in accordance with EPA regulations, 40 C.F.R. Part 85, Subpart T;

E. On January 10, 2005, DDC submitted to EPA an Emission Defect Information Report stating that 2,131 model year 2003 and 2004 Series 50 Urban Bus engines may, under certain operating conditions, emit particulate matter ("PM") at levels in excess of the Not To Exceed ("NTE"), limits imposed by the Decree. DDC has advised the United States that its current review as of October 14, 2005 has identified 2,090 such engines (rather than 2,131), 268 of which are located in Canada. Pursuant to its voluntary recall campaign, DDC has corrected 2,072 out of the 2,090 engines as of September 22, 2005, and has advised the United States that at least 2 of the remaining 18 engines are in Canada. The United States has advised DDC that it

regards this potential NTE exceedance as an additional ground for disputing DDC's certification regarding termination of the on-road requirements of the Consent Decree.

F. The Parties, pursuant to Paragraph 132 of the Consent Decree, engaged in good faith, arms-length negotiations to resolve the dispute described above, including exchanging relevant documents and information, and, as a result of their negotiations, have consented to the resolution of this dispute (the "Agreement") set forth herein;

NOW, THEREFORE, without trial, litigation, or adjudication of any issue of fact or law, and without this Agreement constituting an admission by any Party with respect to the matters in dispute as described above, it is AGREED between the Parties as follows:

#### I. APPLICABILITY

- 1. This Agreement applies to and is binding upon the United States and upon DDC, its employees, contractors, agents, successors, and assigns. Unless approved by the Parties in writing, any change in DDC's ownership or corporate status shall in no way alter DDC's responsibilities under this Agreement. In any action to enforce this Agreement, DDC shall not raise as a defense the failure of its officers, directors, agents, servants, contractors, or employees or their successors to take actions necessary to comply with the provisions hereof.
- 2. DDC shall provide a copy of this Agreement to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Agreement, as well as to any contractor retained to perform work required under this Agreement. DDC shall

require as a term of any such contract performance of the work in conformity with the terms of this Agreement.

#### III. DEFINITIONS

- 3. Unless specifically defined in this Section or elsewhere in this Agreement, terms used herein shall have the meanings referred to or set forth in Section  $\Pi$  (Definitions) of the Consent Decree. The following definitions shall apply for purposes of this Agreement.
- 4. "Conforming NTE Change" means the software or calibration changes to be installed by DDC on the NTE Affected Engines pursuant to this Agreement to ensure that the engines comply with the NTE Limits for PM in the Consent Decree.
- 5. "Conforming White Smoke AECD" means the AECD conforming to DDC's description of its white smoke AECD in the applicable applications for Certificates of Conformity for the White Smoke Affected Engines that DDC has installed (pursuant to its prior voluntary recall of such engines) or will install (pursuant to this Agreement) on such engines.
- 6. "Effective Date" means the date upon which the United States provides written notice to DDC and the Court that the public comment period has closed and that comments received, if any, do not require modification of or the United States' withdrawal from this Agreement.
- 7. "Non-conforming White Smoke AECD" means the AECD installed during production on the White Smoke Affected Engines, as described in DDC's June 6, 2000 Emission Defect Information Report submitted to EPA.
- 8. "NTE Affected Engines" means the HDDEs in the following DDC 2003 and 2004 Model Year On-highway Engine Families:

Engine Type	Model Year	EPA Family Name
Series 50 Urban Bus	2003	3DDXJ08.5FJY
Series 50 Urban Bus	2004	4DDXJ08.5FJY

9. "White Smoke Affected Engines" means the HDDEs in the following DDC 2000 and 2001 Model Year On-highway Engine Families:

Engine Type	Model Year	EPA Family Name
Series 60 12.7L	2000	YDDXH12.7 EGL
Series 60 14L	2000	YDDXH14.0 ELL
Series 50 Truck	2000	YDDXH08.5 EJL
Series 50 Urban Bus	2000	YDDX0H8.5 FJN
Series 50 Urban Bus with EGR	2001	1DDXH08.5 FJY

#### IV. REMEDIAL MEASURES

## A. Recall of White Smoke Affected Engines

- 10. By April 1, 2007, DDC shall have completed a recall to ensure that at least 24,967 White Smoke Affected Engines are modified by replacing the Non-conforming White Smoke AECD with the Conforming White Smoke AECD.
- 11. DDC shall provide for the establishment and maintenance of records to enable the Parties to monitor the implementation of the recall program required pursuant to Paragraph 10. The records shall include the following:
  - (a) The recall program number as designated by DDC, and
- (b) The number of engines modified with the Conforming White Smoke AECD under the recall program.

DDC shall update and maintain the figures pursuant to Subparagraph (b) as cumulative totals at least once every month through March 2007 and as of April 1, 2007.

12. The records required by Paragraph 11 shall be retained by DDC in accordance with the record retention requirements of Section XVIII (Access to Information and Retention of Documents) of the Consent Decree.

## B. Recall of NTE Affected Engines

- 13. By December 1, 2005, DDC shall use its best efforts to recall and modify the remaining 18 NTE Affected Engines by installing the Conforming NTE Change, excluding any of the 18 that are confirmed to have been exported to a location outside the United States.
- 14. DDC has provided the United States with a statement reflecting the status of its voluntary recall campaign as of September 22, 2005. DDC shall maintain records supporting the statement and reflecting the completion of the campaign pursuant to Paragraph 13, including the campaign number as designated by DDC and the number of engines modified between September 22 and December 1, 2005. The records required by this Paragraph shall be retained by DDC in accordance with the record retention requirements of Section XVIII (Access to Information and Retention of Documents) of the Consent Decree.

### C. Supplemental Low NOx Rebuild Program

15. DDC shall implement a supplemental program to reduce NOx emissions by 8,000 tons by September 30, 2006, from DDC's 1994 through 1998 HDDEs through the installation of Low NOx Rebuild Kits on engines for which such kits are available pursuant to Paragraph 84 of the Consent Decree, but were not yet installed as of January 31, 2005. DDC shall not include in calculating the tons achieved under the Supplemental Low NOx Rebuild Program any tons

achieved pursuant to California's Voluntary Software Update Program. The emissions reduction achieved by installation of Low NOx Rebuild Kits shall be calculated in accordance with the algorithm set forth as Attachment 1 to this Agreement.

- 16. In addition to the obligation imposed by Paragraph 15, DDC shall ensure that engines for which Low NOx Rebuild Kits are available that are reprogrammed using DDC software are reprogrammed using only Low NOx Rebuild Kits for as long as those engines remain in service in the United States.
- 17. DDC shall not use or rely on the emission reductions generated as a result of installing Low NOx Rebuild Kits on such additional engines in any Federal or State emission averaging, banking, trading or other emission compliance program, or in connection with any other Federal or State enforcement matter.

#### V. REPORTING

- 18. After the Effective Date, DDC shall include in its written quarterly progress reports pursuant to Paragraph 105 of the Consent Decree through the report for the first quarter of 2007 the following additional information:
- (a) the number of White Smoke Affected Engines in which DDC has installed the Conforming White Smoke AECD in the previous quarter and cumulatively;
- (b) the number of Low-NOx Rebuild Kits DDC has installed pursuant to this Agreement in the previous quarter and cumulatively; and

(c) the amount of emission reductions, in tons, achieved as a result of the Supplemental Low NOx Rebuild Program, calculated in accordance with Attachment 2 to this Agreement.

### VI. AGREED PENALTY UNDER CONSENT DECREE

19. Within ten days of the Effective Date of this Agreement, DDC shall pay an agreed penalty under the Consent Decree to the United States in the amount of \$535,000. Payment shall be made by Electronic Funds Transfer by 4:00 p.m. Eastern Standard Time on the due date to the Department of Justice lockbox bank in accordance with specific instructions to be provided to DDC upon the Effective Date and shall reference Department of Justice Case No. 90-5-2-1-2253, the civil action number of this matter, and this Paragraph of the Agreement. DDC shall transmit notice of such payments to the United States in accordance with Paragraph 111 of the Consent Decree. DDC shall not deduct the payment required by this Paragraph in calculating its federal income tax.

## VII. ADDITIONAL STIPULATED PENALTIES UNDER THIS AGREEMENT

- 20. If DDC fails to install the Conforming White Smoke AECD on 24,967 or more of the White Smoke Affected Engines by April 1, 2007 (as required by Paragraph 10 of this Agreement), DDC shall pay a stipulated penalty of \$250 per engine for each engine less than 24,967 captured by the recall campaign by such date.
- 21. If DDC fails to achieve emission reductions of 8,000 tons of NOx through the Supplemental NOx Emissions Reduction Program by August 31, 2006 (as required by 15 of this Agreement), DDC shall pay a stipulated penalty of \$300 per ton for each ton of emission reductions less than 8,000 tons achieved by such date.

22. The Additional Stipulated Penalties provided for in this Section shall be paid in accordance with, and shall be subject to, the provisions of Section XIV of the Consent Decree (Stipulated Penalties and Other Payments).

## VIII. EFFECT OF AGREEMENT

- 23. This Agreement resolves the dispute regarding DDC's right to termination of the on-road requirements of the Consent Decree. The on-road requirements of Section VI of the Consent Decree shall terminate as of the Effective Date.
- 24. This Agreement also resolves the United States' claims for stipulated or civil penalties or other relief enforcing the Consent Decree with respect to: (a) DDC's use of the Non-conforming White Smoke AECD and (b) any NTE exceedance by an NTE Affected Engine as a result of the defect described in DDC's January 10, 2005, Emission Defect Information Report.
- 25. In consideration of the actions that will be performed and the payments that will be made by DDC under the terms of this Agreement, EPA shall not base a determination under Section 207(c)(1) of the Act, 42 U.S.C. § 7541, that the White Smoke Affected Engines or the NTE Affected Engines do not conform to the regulations prescribed under Section 202 of the Act, 42 U.S.C. § 7521, or a determination under Section 206(b) of the Act, 42 U.S.C. § 7525(b), to suspend or revoke a Certificate of Conformity, on the basis that the White Smoke Affected Engines contain the Non-conforming White Smoke AECD or that the NTE Affected Engines do not conform to applicable emission standards in-use.
- 26. This Agreement does not pertain to any matter other than those expressly specified in Paragraphs 23-25. Nothing in this Agreement shall relieve DDC of its obligation to comply with applicable Federal, State and local laws and regulations, and this Agreement does

not resolve the liability, if any, of any person or entity for any civil claims or claims for stipulated penalties other than the claims referred to in Paragraphs 23-25, or for any criminal claims.

27. This Agreement does not limit, enlarge, or affect the rights of any Party to the Consent Decree as against any third parties. Nothing in this Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Agreement.

#### VIII. GENERAL PROVISIONS

- 28. The provisions of Section XV (Force Majeure) of the Consent Decree shall apply to any Force Majeure event asserted by DCC in connection with this Agreement. Any dispute arising under this Agreement shall be resolved in accordance with the Section XVI (Dispute Resolution) of the Consent Decree. This Agreement is entered into in furtherance of the objectives of the Consent Decree. DDC shall allow access, provide access to information, and retain documents relating to the implementation of this Agreement in accordance with Sections XVIII (Right of Entry) and XIX (Access to Information and Retention of Documents) of the Consent Decree.
- 29. There shall be no modification of this Agreement without written agreement of the Parties.
- 30. This Agreement contains the entire agreement between the United States and DDC with respect to the subject matter hereof. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Agreement.
- 31. The Assistant Attorney General of the Environment and Natural Resources

  Division of the Department of Justice and the undersigned representative of DDC each certify that

he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents.

Agreement Resolving Dispute" with the Court advising it of the dispute addressed herein and the Parties' agreement resolving the dispute. Following the filing of the Notice, the United States will publish notice of this Agreement in the Federal Register and the Agreement shall be subject to a public comment period of not less than 30 days. The United States may withdraw or withhold its consent to this Agreement if comments received disclose facts or considerations indicating that this Agreement is inappropriate, improper, or inadequate.

# United States v. Detroit Diesel Corporation Consent Decree – Agreement Resolving Dispute Signature Page

FOR PLAINTIFF, UNITED STATES OF AMERICA

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# United States v. Detroit Diesel Corporation Consent Decree – Agreement Resolving Dispute Signature Page

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FOR DEFENDANT, DETROIT DIESEL CORPORATION

Detroit Diesel Corporation 13400 Outer Drive, West Detroit, MI 48239-4001

## **Attachment 1**

## Algorithm for Calculation of NOx Credit From Early Low NOx Reflash of In-Use Engines

DDC will maintain a record of the engine serial number, year and month for each installation, as well as a monthly total of the number of engines reprogrammed, including engines reprogrammed with Low NOx calibrations prior to overhaul beginning February 1, 2005. For a sub-population of engines for which the month of recalibration is unavailable, DDC will estimate that date using the mid-point of a date range (not to exceed 8 months), in which the engines entered the reprogrammed data-set.

(1) The NOx Credit for each engine in this program will be calculated according to the following equation:

NOx Credit (Remaining VMT \* Number of Engines \* CF \* K) \* (HD \* (Pre-Recalibration NOx

Level - Post-Recalibration NOx Level))

Remaining VMT The remaining engine VMT before rebuild or scrappage (as described in points 2,

3 and 4, below)

CF Conversion Factor of 2.97 hp-hr/mile

Steady State NOx emissions level before recalibration (as described in point 5, Pre-

Recalibration below)

NOx Levei

Steady State NOx emissions level after recalibration (as described in point 6, Post-Recalibration

below) NOx Level

HD Fraction of highway drive VMT (i.e., of VMT in steady-state injection timing mode)

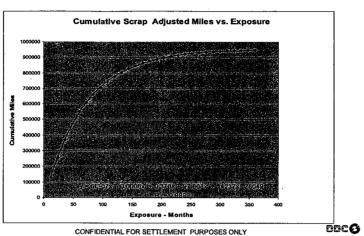
= 0.822

Number of Number of engines recalibrated **Engines** 

1.101 x 10<sup>-6</sup> (conversion from grams to tons (2000 pounds)) Κ

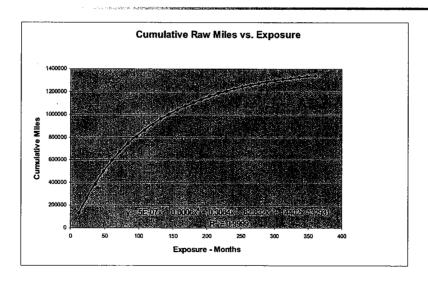
(2) For purposes of calculating remaining vehicle miles travelled (VMT), DDC has calculated an estimate that 52.5% of a given model year engine production is overhauled, based on DDC's 1996-2000 parts sales and warranty data. DDC will determine the credit for each recalibration based on a ratio of 52.5% overhaul to 47.5% non-overhaul, based on DDC's data as described above. For those engines overhauled, the average vehicle mileage to overhaul for the proposed emissions reduction programs will be assumed to be 900,000 miles, based on DDC's data sample from a major customer fleet. For those engines not overhauled, scrap-adjusted mileage accumulation rates apply as shown in Figure 1.

Figure 1: Curve-fit of Mileage Model



(3) DDC will determine the mileage of the engine using estimates based on engine serial number (which provides the estimated build date), year and month of recalibration, and using a non-scrap-adjusted mileage accumulation rate model. This model, which is based on Figure 1 non-scrap-adjusted miles, is shown below in Figure 2.

Figure 1: Non-Scrap-Adjusted Mileage Model



- (4) The mileage accumulation calculation for engines in the field will also be adjusted to reflect the normal 2.5 month time lag between engine build date to start of truck utilization, based on data in DDC's warranty claim database.
- (5) The procedure for establishing the pre-recalibration NOx level for engines in the field will be based on Euro III NOx measurement data, weighted by VMT for the respective test points for each engine rating using DDC's route simulation data, from DDC's Low NOx Rebuild Program calibration development database during which baseline NOx levels were established. Where NOx emissions data at each of the test points are not available for a particular rating, the NOx emissions levels at those points will be estimated.
- (6) The procedure for establishing a post-recalibration NOx level for engines in the field will be based on Euro III NOx measurement data, weighted by VMT for the respective test points for each engine rating using DDC's route simulation data.
- (7) A California exclusion discount factor will be applied to eliminate the estimated fraction of units reprogrammed in California. A figure of 5.5% discount was derived from the figures of 294,445 total nationwide Low NOx reflash affected units (*i.e.*, the population constituting 90% of the engines sold between 1994 and October 1998), and 16,258 affected units registered in the state of California as reported by ARB to DDC on June 30, 2005.

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Defendant.	)	
The state of the s	)	

## **CERTIFICATE OF SERVICE**

I hereby certify that on this 21<sup>st</sup> day of December 2005 I caused a true and correct copy of the NOTICE OF AGREEMENT RESOLVING DISPUTE UNDER CONSENT DECREE to be served upon the following counsel for Defendant by first-class U.S. Mail, postage prepaid:

Jonathan S. Martel, Esq. Arnold & Porter Thurman Arnold Building 555 Twelfth Street, N.W. Washington, D.C. 20004-1202

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